Inquiry: What alternative requirements may be used to evaluate preservice volumetric and surface examination results in lieu of the provisions for Class 1 and 2 components of IWB-3110 and IWC-3110?

Reply: It is the opinion of the Committee that the following provisions may be used in lieu of IWB-3111 and IWB-3112 for Class 1 components or IWC-3111 and IWC-3112 for Class 2 components.

B-3110 CLASS 1

B-3111 GENERAL

(a) The preservice volumetric and surface examinations required by IWB-2200 and performed in accordance with IWA-2200 shall be evaluated by comparing the examination results with the acceptance standards specified in B-3112.

(b) Acceptance of components for service shall be in accordance with B-3112, IWB-3113, and IWB-3114.

B-3112 ACCEPTANCE

(a) A component whose volumetric or surface examination in accordance with IWB-2200 meets (1), (2), or (3) shall be acceptable for service, provided the verified flaws are recorded in accordance with the requirements of IWA-1400, IWA-2220(b), and IWA-6230 in terms of location, size, shape, orientation, and distribution within the component

(1) confirms the absence of flaws or identifies only flaws that have already been shown to meet the nondestructive examination standards of NB-2500 or NB-5300, as documented in Quality Assurance Records (NCA-4134.17).

(2) detects flaws by volumetric examination that are confirmed by surface or volumetric examination to be non-surface-connected and that do not exceed the standards of Table IWB-3410-1.

(3) detects flaws by volumetric examination that are confirmed by surface or volumetric examination to be non-surface-connected and that are accepted by analytical evaluation in accordance with the provisions of IWB-3132.3 to the end of the service lifetime of the component, and reexamined in accordance with the requirements of IWB-2420(b) and IWB-2420(c). The use of Appendix A for preservice inspection results is acceptable.

(b) A component whose volumetric or surface examination detects flaws that do not meet the criteria established in (a) shall be unacceptable for service, unless the component is corrected by a repair/replacement activity in accordance with IWB-3113 to the extent necessary to meet the provisions of (a) prior to placement of the component in service.

C-3110 CLASS 2

C-3111 GENERAL

(a) The preservice volumetric and surface examinations required by IWC-2200 and performed in accordance with IWA-2200 shall be evaluated by comparing the examination results with the acceptance standards specified in C-3112.

(b) Acceptance of components for service shall be in accordance with C-3112, IWC-3113, and IWC-3114.

C-3112 ACCEPTANCE

(a) A component whose volumetric or surface examination in accordance with IWC-2200 meets (1), (2), or (3) shall be acceptable for service, provided the verified flaws are recorded in accordance with the requirements of IWA-1400, IWA-2220(b), and IWA-6230 in terms of location, size, shape, orientation, and distribution within the component

(1) confirms the absence of flaws or identifies only flaws that have already been shown to meet the nondestructive examination standards of NC-2500 or NC-5300, as documented in Quality Assurance Records (NCA-4134.17).
(2) detects flaws by volumetric examination that are confirmed by surface or volumetric examination to be non-surface-connected and that do not exceed the standards of Table IWC-3410-1.

(3) detects flaws by volumetric examination that are confirmed by surface or volumetric examination to be nonsurface-connected, that are accepted by analytical evaluation in accordance with the provisions of IWC-3132.3 to be acceptable to the end of the service lifetime of the component, and reexamined in accordance with the requirements of IWB-2420(b) and IWB-2420 (c), in lieu of IWC-2420(b) and IWC-2420(c).

(b) A component whose volumetric or surface examination detects flaws that do not meet the criteria established in (a) shall be unacceptable for service, unless the component is corrected by a repair/replacement activity in accordance with IWC-3113 to the extent necessary to meet the provisions of (a) prior to placement of the component in service.